Gavazov K., Simeonova Zh., Alexandrov A., *Extraction-spectrophotometric study of the system vanadium(V) - 4-(2-pyridylazo)resorcinol (PAR) – tetrazol violet (TV) – water – 1,2-dichloroethane*, ***Journal of the University of Chemical Technology and Metallurgy*, 38**(3) (2003) 909-916.

The system vanadiumm - 4-(2-pyridylazo)-resorcinol (PAR) - tetrazol violet (TV) - water - 1,2-dichloroetane is studied using an extraction-spectrophotometric method. The optimum conditions for extraction of vanadium are found: reagent concentration in aqueous phase - $C_{PAR} = C_{TV} = 2.0\times10^{-4}$ mol $L^{-1}$, pH=5.8, extraction time - 2 min. Beer's law is obeyed in the concentration interval 0.5 - 25 μg V(V) / 10 mL. Molar absorptivity calculated using the Beer's law is $\varepsilon_{555}= 4.0\times10^{4}$ L $mol^{-1}$ $cm^{-1}$. Under the optimum extraction conditions the dominating vanadium species is established to be V(V):PAR:TV = 1:2:3. The following constants are calculated: distribution constant (Log $K_D$=1.48), association constant (Log β = 16.4), extraction constant (Log$K_{ex}$ = 17.9), recovery factor (R=96.8%). The eflect of foreign ions on the extraction of vanadium is studied as well.

*Keywords: vanadium, PAR, tetrazol violet, ternary complex, extraction-spectrophotornetry.*